

CUFF FOR MEASUREMENT OF BLOOD PRESSURE

ABSTRACT OF THE DISCLOSURE

A blood pressure cuff including an elongate, inflatable bladder disposed between an elastic, resilient inner layer of material and at least one outer layer of material. The bladder is secured to these layers along the elongate ends but not along the elongate edges. The bladder is not laterally constrained during inflation and can readily conform to a subject's limb. Preferably the cuff is formed into a cylindrical shape having a fixed outer diameter selected to accommodate an upper limit of arm circumference within the cuff. The cuff may include a stiff backing layer and means for securing the bladder to a layer of the cuff to hold the bladder in place during donning of the cuff by a subject. Because the bladder is not constrained along its contact-width edges, the shape of the bladder automatically adjusts to provide a longer contact surface for larger arms and a shorter contact surface for smaller arms, making the cuff useful over a much wider range of arm sizes than can be accommodated by any single prior art closed cuff. A cuff in accordance with the invention is especially suited to use as a closed cuff in an automated blood pressure measurement machine or in stand-alone measurement use.